

## Claims

1. A fuel cell comprising:

a catalyst coated proton exchange membrane disposed between an anode substrate and a cathode substrate, each of said substrates being provided with an edge seal formed of a sealant material extruded into the substrate by a hot lamination process, at least one of said substrates having a foam gasket adhered thereto by said sealant material film during said hot lamination process.

2. A fuel according to claim 1 wherein both of said substrates have a foam gasket adhered thereto by said sealant material during said hot lamination process.

3. A fuel cell according to claim 1 wherein:  
said sealant material comprises a thermoplastic polymer.

4. A fuel cell according to claim 1 wherein:  
said sealant material comprises a thermoset polymer.

5. A fuel cell according to claim 1 wherein:  
said sealant material comprises an elastomeric polymer.

6. A fuel cell according to claim 1 wherein only one of said substrates has a foam gasket adhered thereto, and wherein:  
the other of said substrates has a reactant gas flow field plate adhered thereto by said sealant material which is extruded into said substrate by said hot lamination process, and a reactant gas flow field plate related to said one substrate is adhered to said first

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7. A fuel cell stack comprising a plurality of fuel cells according to claim 6 compressed together, whereby the foam gasket of one fuel cell provides a gas seal with the second reactant flow field plate of a fuel cell adjacent thereto in said stack.